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IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A tilt control device for controlling a
35 radial tilt of a recording surface of an optical disc with respect
to an optical recording/reproducing beam, said tilt control device
comprising:

control means for generating two focus controlling
outputs; and

40 actuating means for receiving said two focus controlling
outputs for controlling a focusing state and the radial tilt of the
optical recording/reproducing beam utilizing said received two
focus controlling outputs, wherein said control means determines a
radial tilt value based on a differentiation of focus control

45 values obtained at different radii of said optical disk; and
wherein said control means calculates a mean disc tilt
value in a tilt register.

2. (Previously Presented) The device as claimed in claim 1,
wherein said actuating means comprises a split focus coil
arrangement for providing focus and tilt adjustment, and said
control means supplies said two focus controlling outputs to
5 respective coils of said split focus coil arrangement.

3. (Previously Presented) The device as claimed in claim 1,
wherein said focus controlling outputs are Proportional Integral
Derivative (PID) controller outputs.

4. (Previously Presented) The device as claimed in claim 1,
wherein said control means positions a sledge at at least two
different radial positions, controls said actuating means to adjust

the focus, and measures said focus control values at said at least
5 two different radial positions.

5. (canceled) The device as claimed in claim 1, wherein said control means calculates a mean disc tilt value in a tilt register.

6. (Previously Presented) The device as claimed in claim 1, wherein said control means generates said focus controlling outputs based on measured mean focus control values and corresponding radial steps between two measurements.

7. (currently amended) A tilt control device for controlling a radial tilt of a recording surface of an optical disc with respect to an optical recording/reproducing beam, said tilt control device comprising:

5 control means for generating two focus controlling outputs; and

actuating means for controlling a focusing state and the radial tilt of the optical recording/reproducing beam based on said two focus controlling outputs, ~~characterized in that~~ wherein said
10 control means determines a radial tilt value based on a differentiation of focus control values obtained at different radii of said optical disk, wherein said control means calculates a mean disc tilt value said mean disc tilt value is obtained based on the following equation:

$$r_{\beta} = \frac{G_c c_f \Delta r_f}{c_f (a_1 + a_2) \Delta R}$$

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where Δr_f is the difference between two averaged focus control values measured at initialization, ΔR is a sledge step in radial direction between two measurements, G_c is the factor between actuator tilt and disc tilt for which comatic aberrations are

20 optimal corrected, c_f is a spring constant acting against a
focusing movement, c_t is a spring constant acting against a tilt
movement, a_1 is a distance of a first coil of said split coil
arrangement with respect to a symmetry line, and a_2 is a distance
of a second coil of said split coil arrangement with respect to
25 said symmetry line.

8. (Previously Presented) The device as claimed in claim 1,
wherein said device further comprises a tilt table for storing an
information indicating mean disc tilt values and corresponding
radial positions.

9. (Previously Presented) An optical disc player comprising a
tilt control device as claimed in claim 1.

10. (canceled) A tilt control method for controlling a radial
tilt of a recording surface of an optical disc with respect to an
optical recording/reproducing beam, said tilt control method
comprising the steps acts of:

5 generating a focus controlling output and a tilt
controlling output; and
receiving said focus and tilt controlling outputs at an
actuator to control a focusing state of the optical
recording/reproducing beam and the radial tilt utilizing said
10 received focus and tilt controlling outputs; and
determining a radial tilt value based on a differentiation
of focus control values obtained at different radii of said optical
disk.

11. (canceled) The method as claimed in claim 10, wherein said
receiving said focus and tilt controlling outputs act comprises
using a split coil arrangement arranged to provide a focus

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adjustment, said focus and tilt controlling outputs being supplied
5 to respective coils of said split coil arrangement.

12. (canceled) The method as claimed in claim 10, wherein said receiving said focus and tilt controlling outputs act comprises using a mean focus controlling output for tilt control.

13. (Cancelled).

14. (currently amended) A tilt control device for controlling a radial tilt of a recording surface of an optical disc with respect to an optical recording/reproducing beam, said tilt control device comprising:

5 a processor configured to generate two focus control outputs; and
an actuator configured to:
receive said two focus control outputs; and control a focusing state and the radial tilt of the optical
10 recording/reproducing beam utilizing said received two focus control outputs, wherein said processor determines a radial tilt value based on a differentiation of focus control values obtained at different radii of said optical disk; and
... wherein said processor calculates a mean disc tilt value
15 in a tilt register.

15. (Previously Presented) The device as claimed in claim 14, wherein said actuator comprises a split focus coil arrangement for providing focus and tilt adjustment, and said processor supplies said two focus control outputs to respective coils of said split
5 focus coil arrangement.

16. (canceled) The device as claimed in claim 14, wherein said processor calculates a mean disc tilt value in a tilt register.

17. (currently amended) The device as claimed in claim ~~16~~ 14, wherein said mean disc tilt value is obtained based on the following equation:

$$r_{\theta} = \frac{G_c c_f \Delta r_f}{c_f (a_1 + a_2) \Delta R}$$

5 where Δr_f is the difference between two averaged focus control values measured at initialization, ΔR is a sledge step in radial direction between two measurements, G_c is the factor between actuator tilt and disc tilt for which comatic aberrations are optimal corrected, c_f is a spring constant acting against a
10 focusing movement, c_t is a spring constant acting against a tilt movement, a_1 is a distance of a first coil of said split coil arrangement with respect to a symmetry line, and a_2 is a distance of a second coil of said split coil arrangement with respect to said symmetry line.

18. (Previously Presented) The device as claimed in claim 14, wherein said device further comprises a tilt table for storing an information indicating mean disc tilt values and corresponding radial positions.

19. (Previously Presented) The device as claimed in claim 14, wherein said processor generates said focus control outputs based on measured mean focus control values and corresponding radial steps between two measurements.